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Book review

Plant Tissue Culture, Development, and Biotechnology, R.N. Trigiano, D.J. Gray (Eds.), 2011, CRC Press, Boca Raton, Florida, USA, Price: $99.95, Paperback with 583 pages, ISBN: 978-1-4200-8326-2, Website:www.crcpress.com

Over the past few years many books have been published in relation to the fast moving field of Plant Tissue and Organ Culture/Biotechnology. In fact, the International literature abounds with contributions in this active field. These activities are fueled by the need for conservation of our natural plant resources, the need for better medicinal products, increased food security, dwindling energy resources and increased concern with global warming and depletion of water resources. All these aspects are covered, if not directly, then at least covertly in this comprehensive coverage of the field generally included in the now common term Biotechnology. The Editors are to be complimented on bringing together the views of so many of the World's current experts in this field.

For convenience of referencing, the Book is divided into five Sections, covering 45 individual Chapters, each dealing with a specific field/topic. The Editors tried to assign each Chapter to one or a group of experts in the field. This has ensured broad/in-depth coverage of the various topics selected. Section I is an Introduction by the Editors, setting the scene for what is to follow. It outlines what they wished to achieve with this valuable contribution. In Section II, considerable attention (10 Chapters) is given to the "Supporting Methodologies and General Concepts" when dealing with modern Biotechnology. This section is invaluable for those students and/or researchers wishing to enter this field. It covers, amongst others, anatomy, histological techniques, microscopes, growth regulators and molecular approaches, to mention but a few topics to consider when entering this field. Section III deals with propagation and developmental processes. Basically it covers, in 14 Chapters, the problems associated with decontamination and the establishment of *in vitro* cultures, shoot–leaf–root cultures, organogenesis, embryogenesis and the use of suspension cultures.

Section IV moves to the many "Crop Improvement Techniques" that had been developed over the last three decades. The use of protoplasts, haploid culture, embryo rescue, somaclonal variation, cryopreservation, gene expression regulation and the production of natural products are expertly covered in the 18 Chapters included in this Section. These Chapters form an integrated unit indicating that much time and effort has gone into its compilation.

As one would expect, the final Section V covers the "Business" section. This is the main reason for embarking on many of the studies in this field. There are only two Chapters covered in this Section, of these "Intellectual Property Protection" is probably a major issue to entrepreneurial companies. I am pleased that the Editors did not waste too much time here as the Book is about Science and not Economic gain.

I found this Book very comprehensive with much to offer the students, teachers and researchers. It is a valuable contribution to possess and it will remain of value for a very long time. It would be advisable for all Libraries to have copies on their shelves.

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